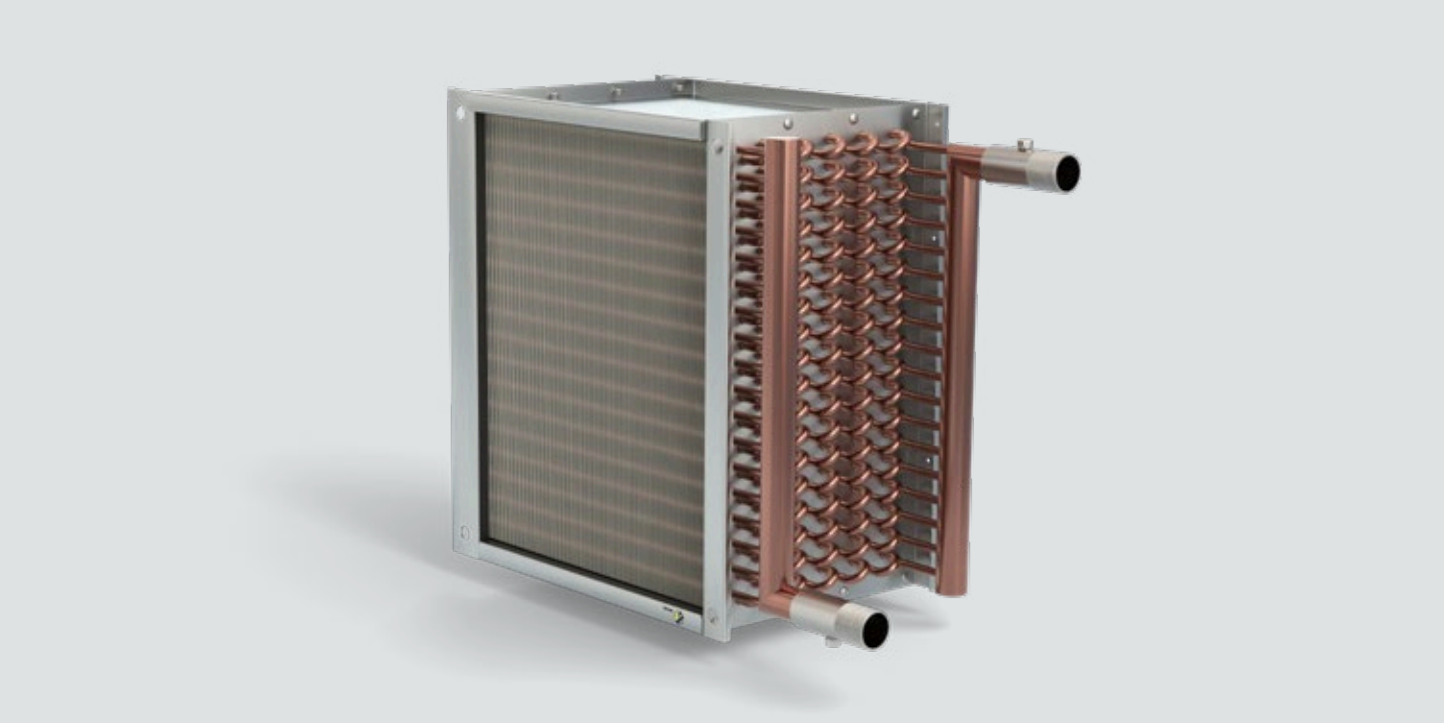
Kelvion

Kelvion Coils

LEADING-EDGE PRODUCTS FROM INNOVATION AND EXPERIENCE



DESIGN & FUNCTION

Kelvion heat exchanger coils are manufactured with copper tubes and aluminum or copper fins. Special profiles on the fins, developed by our R&D department, enhance heat transfer and maintain pressure drop at a moderate level.

Collars allow for customized fin spacing, as well as providing the contact between the fin block and the tubes. Mechanical expansion of the tubes guarantees a perfect bond between the fins and tubes for maximum heat transfer between both fluids.

Several tubes are interconnected via brazed return bends to form the coil circuits, which receive the working fluid via brazed tubular headers.

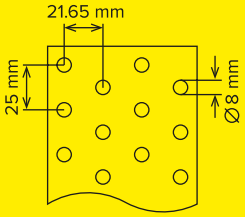
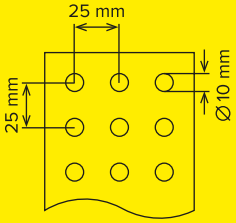
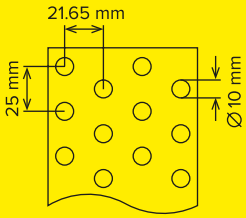
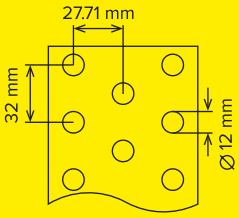
The thermodynamic design is created with our in-house developed selection software, based on the measurements in our laboratory, which conform to DIN EN1216. Rigorous testing supports quality control of our coils.

ADVANTAGES

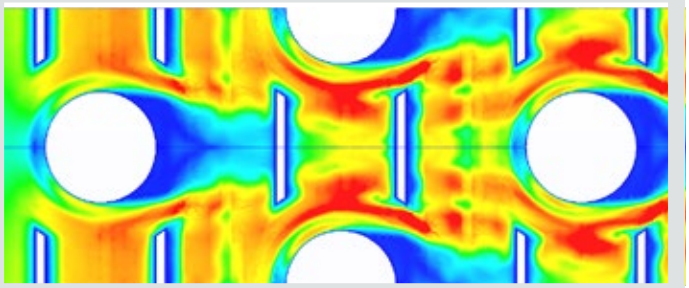
- ADVANCED AND RELIABLE THERMAL SELECTION CAPABILITIES
- UNIQUE HIGH-PERFORMANCE FIN DESIGNS
- EXCELLENT CUSTOMER SERVICE AND SUPPORT
- FAST DELIVERY EVEN FOR 100% CUSTOM DESIGNED UNITS
- LONG LIFE CYCLE / DURABILITY

Coil types
Air heater, Air cooler, Run around coil, Condenser, DX Evaporator, Multi-sectional coil, Reversible coil, Heat pipe, Round / square coil

Technical specifications (further specifications on request)

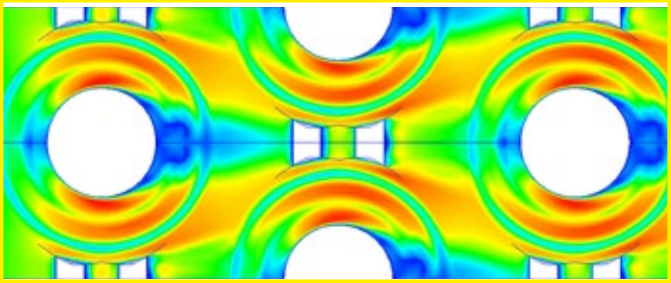
	P8	S25-inline	S25-staggered	S32
Fin tube pattern				
Tube arrangement	staggered	inline	staggered	staggered
Tube pitch	25 mm	25 mm	25 mm	32 mm
Row pitch	21.65 mm	25 mm	21.65 mm	27.71 mm
Tube diameter	7.94mm	10 mm	10 mm	12 mm
Tube wall thickness	0.28 mm – 0.35 mm	0.3 mm – 0.8 mm	0.3 mm – 0.8 mm	0.35 mm – 0.8 mm
Tube inner profile	smooth, grooved	smooth, grooved	smooth, grooved	smooth, grooved
Fin thickness	0.12 – 0.18 mm	0.12 – 0.14 mm	0.12 – 0.14 mm	0.12 – 0.2 mm
Fin pitch	1.6 – 4.0 mm	1.8 – 3.0 mm	1.8 – 3.0 mm	1.8 – 4.0 (7) mm
Fin profile	uniquely waved	flat	corrugated	flat, corrugated, turbulators
Fin materials	aluminum, aluminum epoxy, copper	aluminum, AlMg2.5, aluminum epoxy, copper	aluminum, AlMg2.5, aluminum epoxy, copper	aluminum, AlMg2.5, aluminum epoxy, copper
Max. tube length	200 – 4000 mm	100 – 1000 mm	100 – 1000 mm	200 – 14,000 mm
Max. coil height	128 – 2176 mm	50 – 525 mm	50 – 525 mm	128 – 2176 mm

REGULAR FIN DESIGN



FLOW FIELDS BETWEEN FINS (CFD)

HIGH EFFICIENT KELVION FIN DESIGN



FLOW FIELDS BETWEEN FINS (CFD)

Additional options
- Connection types:
  steel-threaded nozzle, steel flange, brass fittings, smooth tube for brazing on site
- Casing designs:
  no casing, only side plates, complete casing, air-tight casing
- Casing materials:
  galvanized steel, stainless steel, aluminum, copper
- Coatings:
  Blygold ™, Heresite ™ (Säkaphen), G13-7051 (Friessen)

Application limits
- max. operation temperature: 150 °C
- max. operation pressure: 40 bar

Certificates
- ISO 9001
- PED (2014/68/UE)
- PZH (hygienic certificate HK/B/0288/02/2015)
- ЕАЭС N RU Д-PL.БЛ08.B.03286